

Appendices

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Appendix 1

Glossary of Terms and Acronyms

The appendix provides definitions for many of the important terms used in this document.

Action Level – Under the 40 CFR §264.521 of the Subpart S rule, action levels are media-specific health and environmental-based contaminant concentrations determined by EPA to be protective of human health and the environment. Action levels are established for each environmental medium, including groundwater, and serve as the trigger for the requirement to conduct a RCRA Corrective Measures Study (CMS). If the RFI determines that hazardous constituent concentrations in groundwater, surface water, soils, or air exceed an action level, a CMS is usually required. If actions levels are not exceeded, the facility may request a “Determination of No Further Action,” ending the corrective action requirements at that unit.

Alternate Concentration Level (ACL) – Under 40 CFR Part 264- Subpart F, an ACL is a concentration limit for a hazardous constituent in groundwater that the EPA Regional Administrator finds will not pose a substantial present or potential hazard to human health or the environment as long as that concentration is not exceeded. 40 CFR §264.93(b) details the specific factors that the EPA Regional Administrator must consider when establishing an ACL.

Applicable or Relevant and Appropriate Requirements (ARARs) – “Applicable” requirements are those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under Federal or State environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site. “Relevant and appropriate” requirements are those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under Federal environmental or State environmental or facility siting laws that, while not “applicable” to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site. Only those State standards that are identified by a State in a timely manner and that are more stringent than Federal requirements may be applicable.

Area of Concern (AOC) – Any suspected release of a hazardous waste or hazardous waste constituent that is not associated with a solid waste management unit.

Cleanup – Actions undertaken during RCRA Corrective Action or CERCLA response to physically remove or treat a hazardous substance or hazardous waste that poses a threat or potential threat to human health and welfare and the environment and/or real or personal property. Sites are considered cleaned up when EPA has no further expectation or intention of returning to the site and threats have been mitigated or do not require further action.

Community Relations Plan (CRP) – A plan for all responses lasting longer than 45 days, which addresses local citizens’ and officials’ concerns about a hazardous waste release and for integrating community relations activities into the technical response at the site. The CRP should help prevent disruptions and delays in response actions and partially fulfill the National Environmental Policy Act (NEPA) requirements for public notification and participation.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 (42 U.S.C. §9601 et seq.).

Comprehensive Environmental Response, Compensation and Liability Information System

(CERCLIS) – EPA's comprehensive data base and management system that inventories and tracks releases addressed or needing to be addressed by the Superfund program. CERCLIS contains the official inventory of CERCLA sites and supports EPA's site planning and tracking functions.

Conditional Remedy – Under the Subpart S proposed rule, a conditional remedy is a type of corrective measure where contamination is allowed to remain within the facility boundary, provided the facility takes action to meet certain conditions. These conditions include (1) protection of human health and the environment; (2) achievement of all media cleanup standards (MCS) beyond the facility boundary, as soon as is practical; (3) prevention of further environmental degradation through source controls and the use of engineered measures (i.e., groundwater extraction and treatment systems to prevent contaminant migration) to prevent further migration of the release within the facility boundary; (4) implementation of management and institutional controls to prevent exposure to hazardous wastes at the facility; (5) continuation of environmental monitoring to determine if additional environmental degradation occurs; (6) provision for financial assurances (not applicable to Federal facilities); and (7) compliance with standards for waste management for wastes generated during the corrective measure.

Construction Quality Assurance Plan (CQAP) – A written document that specifies the quality assurance requirements and performance specifications for the construction of the corrective measure.

Corrective Action Management Unit (CAMU) – A CAMU, as defined in the CAMU and TU final rule (58 FR 8658), is an area within a facility that is designated by Regional Administrator under 40 CFR §264- Subpart S, for the purpose of implementing corrective action. A CAMU shall only be used for the management of remediation wastes pursuant to implementing such corrective action requirements at the facility.

Corrective Measure (CM) – The fourth phase of the RCRA Corrective Action process. The corrective measure encompasses all activities related to the long-term remediation of a release of hazardous waste or hazardous waste constituents from an SWMU.

Corrective Measures Study (CMS) – The third phase of RCRA Corrective Action in which alternatives for the corrective measure are evaluated on the basis of performance, practicality, implementability, and cost. This phase is similar to a feasibility study (FS) under Superfund.

Data Collection Quality Assurance Plan (DQAP) – A written document, associated with all RCRA Corrective Action sampling activities, that presents in specific terms the organization, objectives, functional activities, specific quality assurance (QA) and quality control (QC) activities and sampling and analytical practices designed to achieve the data quality objectives established for the project or operation.

Data Management Plan (DMP) – A document that details the data reduction, reporting, and validation procedures for RCRA Corrective Action sampling and analysis activities.

Data Quality Objectives (DQOs) – Qualitative and quantitative statements that are developed before sampling begins to identify the quality of data that must be collected during Superfund actions.

Discovery – Discovery refers to the notification, observance, or detection of a release or substantial threat of release or discharge of a hazardous substance, hazardous waste, hazardous waste constituent, or oil into the environment. A discovery may be made through notification or investigation in accordance with statutory requirements, incidental observation by government agencies or the public, notifications by permit holders, or inventory efforts conducted by Federal, State, or local agencies.

Disposal – The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid or hazardous waste into or on any land or water so that such solid waste or hazardous waste or constituent of such waste may enter the environment or be emitted to the air, or discharged into the water, including groundwater.

Engineering Evaluation/Cost Analysis – A comparative analysis of the engineering feasibility, the cost, and the benefits of options for non-time-critical removals.

Environment – (1) The navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States, and (2) any other surface water, groundwater, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States. The term includes air and water quality, land disturbances, ecology, climate, public and occupational health and safety, and socioeconomic (including non-availability of critical resources and institutional, cultural, and aesthetic considerations) normally referred to as environmental, health, and safety considerations.

Environmental Assessment (EA) – A limited-scope analysis of the environmental impact of a Federal action, typically conducted to determine if an Environmental Impact Statement (EIS) is required.

Environmental Impact Statement (EIS) – A document that presents the findings of an analysis of the environmental impact of a major Federal action. Under the National Environmental Policy Act (NEPA) an EIS is required for all major Federal actions. Typically these documents include evaluation of environmental, human, and socio-economic impacts of the action.

Facility – (1) All contiguous lands and property under the control of the owner/operator, including any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (2) any site or area where a hazardous substance, hazardous waste, or hazardous waste constituent has been deposited, stored, disposed of, or placed, or otherwise come to be located but does not include any consumer product in consumer use or any vessel.

Feasibility Study (FS) – A study undertaken by the lead agency to develop and evaluate options for remedial action. The feasibility study emphasizes data analysis, implementability of alternatives, and cost analyses, as well as compliance with mandates to protect human health and the environment and attain regulatory standards of other laws. The FS is generally performed concurrently and in an interactive fashion with the RI, using data gathered during the RI.

Federal Facilities Compliance Docket – Officially known as the “Federal Agency Hazardous Waste Compliance Docket,” it is commonly referred to as “the Docket.” The Docket is a list of all federally owned or operated facilities (1) requiring submission of a notification of ongoing RCRA activities under RCRA §3010 or a RCRA permit or interim status under RCRA §3005, (2) for which a RCRA §3016 report is required, or (3) requiring reporting under CERCLA §103. All sites listed on the first Docket were required to have had a preliminary assessment conducted within 18 months of October 17, 1986, and the final National Priorities List (NPL) listing decision reached within 30 months of October 17, 1986. Current EPA policy is that all sites listed on the fourth Docket Update (September 27, 1991) must have a Preliminary Assessment (PA), and if warranted a Site Inspection (SI), completed within 18 months.

Federal Facility Compliance Agreement (FFCA) or Federal Facilities Agreement (FFA) – A formal agreement among a Federal agency, EPA, and/or a State that establishes the procedural and technical requirements for resolving non-compliance with environmental laws and regulations at a Federal facility.

Field Sampling Plan (FSP) – An FSP provides a detailed discussion of the sampling objectives, methods, frequency, and rationale for field operations. The elements of an FSP are discussed in Volume 4 of the EPA document *Test Methods for Evaluating Solid Waste, 3rd Edition* (SW-846). The basic requirements of an FSP include discussion of site background, sampling objectives, sampling point location and sampling frequency, sample identification, sampling equipment and procedures, and sample handling and analysis.

Hazard Ranking System (HRS) – A scoring system used to evaluate relative risks to public health and the environment from releases or threatened releases of hazardous substances. EPA and States use the HRS to calculate a site score, from 0 to 100, based on the actual or potential release of hazardous substances from a site through air, surface water, groundwater, or soil exposure and the potential effects of exposure to such releases on people, the food chain, or sensitive environments. This score is the primary factor used to decide if a hazardous waste site should be placed on the National Priorities List (NPL).

Hazardous Substance – As defined by CERCLA, means (1) any substance designated pursuant to Section 311 (b)(2)(A) of the FWPCA; (2) any element, compound, mixture, solution, or substance designated pursuant to section 102 of this Act; (3) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (SWDA) (but not including any waste the regulation of which under the SWDA has been suspended by Act of Congress); (4) any toxic pollutant listed under Section 307(a) of the FWPCA; (5) any hazardous air pollutant listed under Section 112 of the CAA; and (6) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to Section 7 of the Toxic Substances Control Act (TSCA). The term does not include petroleum (or crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under sub-paragraphs [1] through [6] of this paragraph) and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

Hazardous Waste – A solid waste, or combination of solid waste, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (1) cause, or significantly contribute to, an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

Under RCRA Corrective Action this term means any solid waste which (1) meets the definition of hazardous waste provided above; (2) is a listed waste; (3) demonstrates a characteristic of a hazardous waste; (4) or is mixed with a hazardous waste, provided it is not specifically excluded from the definition of a hazardous waste. Under the proposed Subpart S rule, EPA also intends to include all hazardous waste constituents listed in 40 CFR §261 Appendix VIII and the compounds listed in 40 CFR §264 Appendix IX in the definition of hazardous waste.

Hazardous Waste Constituent – Under RCRA Corrective Action, hazardous waste constituents are those compounds listed in 40 CFR §261 Appendix VIII and the compounds listed in 40 CFR §264 Appendix IX.

Interagency Agreement (IAG) – A written agreement, enforceable by law, between EPA and another Federal agency, where goods and/or services are provided, whether or not in exchange for monetary reimbursement, or where policy agreements are delineated. IAGs for CERCLA activities may function both as obligating documents and as reporting documents necessary for EPA financial and program management.

An IAG usually is a comprehensive document that addresses all hazardous waste activities that will be conducted at a Federal facility or with another Federal agency (e.g., Corps of Engineers), from the RI/FS through the implementation of the remedial action. An IAG formalizes the procedures and timing for submittal and review of documents and establishes a mechanism to resolve disputes.

Interim Measures – Under corrective action, interim measures are actions taken to mitigate actual or potential threats while a long-term, comprehensive corrective action strategy is being developed.

Interim Status – The period during which a hazardous waste treatment, storage, or disposal facility, which was in existence as of November 19, 1980, may continue to operate without an approved RCRA permit. To qualify for interim status, a facility must have filed a Part A of the RCRA permit application. New facilities are, by definition, ineligible for interim status.

Long-term Remedial Action Sites – LTRA sites are CERCLA sites where achieving the remedial objectives requires continuous operation of the remedy over several years.

Media Cleanup Standards (MCS) – Specific contaminant levels established for each medium, determined by EPA to be protective of human health and the environment, which the corrective measure must achieve.

National Contingency Plan (NCP) – Officially known as the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR §300), the NCP outlines the responsibilities and authorities for responding to releases into the environment of hazardous substances and other pollutants and contaminants under the statutory authority of CERCLA and Section 311 of the CWA.

National Priorities List (NPL) – EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial response. The list is based primarily on the score a site receives on the Hazard Ranking System (HRS). EPA is required to update the NPL at least once a year.

Notice of Noncompliance (NON) – A formal notification from EPA to a Federal facility that specifies areas where the facility is noncompliant with Federal environmental statutes or regulations.

Operation and Maintenance (O&M) – Activities conducted at a site after a response action occurs, to ensure that the cleanup or containment system is functioning properly.

Phased Remedy – Analogous to an operable unit under CERCLA, a phased remedy under RCRA Corrective Action is when EPA approves the sequential implementation of a corrective measure without placing any conditions on the implementation (for a discussion of the conditions imposed, see the definition of conditional remedy); such actions are referred to as a “phased remedy.”

Point of Compliance – For regulated units, the vertical surface located at the hydraulically downgradient limit of the waste management area that extends down to the bottom of the uppermost aquifer. For corrective action, the point where the facility must demonstrate compliance with the cleanup standards set for the corrective measure.

Pollutant or Contaminant – As defined under CERCLA §101 (33), includes, but is not limited to, any element, substance, compound, or mixture, including disease-causing agents, which, after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring; except that the term “pollutant or contaminant” shall not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of paragraph (14) and shall not include natural gas, liquefied natural gas, or synthetic gas or pipeline quality (or mixtures of natural gas and such synthetic gas).

Preliminary Assessment (PA) – The process of collecting and reviewing available information about a known or suspected release of a hazardous substance. EPA and States use this information to determine if the site requires further study. If further study is needed, a site inspection (SI) is undertaken.

Program Management Plan (PMP) – A document that details the mission of the program, the delegations of authority, and other information specific to the environmental restoration activities at a given facility that is not specific to a given unit or site.

Proposed Plan – A public participation requirement of SARA in which EPA summarizes for the public the preferred cleanup strategy, the rationale for the preference, the alternatives presented in the detailed analysis of the remedial investigation/feasibility study, and any waivers to cleanup standards of Section 121 (d)(4) which may be proposed. This may be prepared either as a fact sheet or as a separate document. In either case, active solicitation of public review and comment on all alternatives under agency consideration is required.

Public involvement Plan (PIP) – Under corrective action, a PIP is a formal plan developed and implemented by the facility for the dissemination of information to the public regarding investigation activities and results.

Quality Assurance Project Plan (QAPP) – A QAPP describes the policy, organization, functional activities, and quality assurance and quality control (QA/QC) protocols necessary to achieve the DQOs.

RCRA §3008(h) Order – An administrative order to compel compliance with the applicable regulations which is issued by EPA to a facility operating under interim status.

RCRA Facility Assessment (RFA) – The first step in the RCRA Corrective Action process. The RFA is a preliminary evaluation to determine if there are actual or potential releases of hazardous wastes or hazardous waste constituents from SWMUs at a RCRA permitted or interim status facility.

RCRA Facility Investigation (RFI) – The second step of the RCRA Corrective Action process. The RFI is a focused investigation of SWMUs with identified actual or potential releases of hazardous wastes or hazardous waste constituents. The RFI is intended to characterize the extent and nature of these releases, to evaluate the risk posed by the release, and to determine if a Corrective Measures Study is required.

RCRA Permit – A permit issued by EPA to any facility that treats, stores, or disposes of hazardous wastes. The RCRA permit consists of two parts. The Part A application discusses general information about the facility. The Part B application is a detailed discussion of how the facility intends to comply with the applicable regulations.

Record of Decision (ROD) – A public document that explains which cleanup alternative(s) will be used at NPL sites. The ROD is based on information and technical analysis generated during the RI/FS and consideration of public comments and community concerns.

Regulated Unit – Regulated units are land-based units used to manage hazardous waste (e.g., surface impoundments, land treatment units, waste piles, landfills) that received hazardous wastes after July 26, 1982.

Release – As defined by CERCLA, means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant); but excludes

- Any release that results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons;
- Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine; and
- Release of source, by-product, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act (AEA), if such release is subject to requirements with respect to financial protection established by the (NRC) under Section 170 of such Act, or, for the purpose of Section 104 of CERCLA or any other response action, any release of source.

Under RCRA Corrective Action, the term “release” applies only to releases of hazardous wastes or hazardous waste constituents.

Remedial Design (RD) – An engineering phase that follows the Record of Decision (ROD) when technical drawings and specifications are developed for the subsequent remedial action at a site on the NPL.

Remedial Investigation (RI) – As defined under CERCLA, the RI is a process undertaken by the lead agency to determine the nature and extent of the problem presented by a release. The RI emphasizes data collection and site characterization, and is generally performed concurrently and in an interactive fashion with the feasibility study. The RI includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

Remedial Investigation/Feasibility Study (RI/FS) – Investigative and analytical studies usually performed at the same time and in an interactive, iterative process, and together referred to as the “RI/FS. ” They are intended to the following:

- Gather the data necessary to determine the type and extent of contamination at a Superfund site,
- Establish criteria for cleaning up the site,
- Identify and screen cleanup alternatives for remedial action, and
- Analyze in detail the technology and costs of the alternatives.

Remedy or Remedial Action (RA) – Those actions consistent with a permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. The term includes, but is not limited to, such actions at the location of the release as storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances and associated contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, on-site treatment or incineration, provision of alternative water supplies, and any monitoring reasonably required to ensure that such actions protect the public health and welfare and the environment.

Remove or Removal – The cleanup or removal of released hazardous substances from the environment; such actions as may be necessary in the event of the threat of release of hazardous substances into the environment; such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances; the disposal of removed material; or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release. The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for, action taken under Section 104(b) of CERCLA, and any emergency assistance which may be provided under the Disaster Relief and Emergency Assistance Act.

Reportable Quantity (RQ) – The quantity of a hazardous substance that, if released into the environment, may present substantial danger to the public health or welfare or the environment and must be reported to either the National Response Center or EPA. RQs are set forth in 40 CFR §302.

Resource Conservation and Recovery Act (RCRA) – The Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments (HSWA) (42 U.S.C. §6901 et seq.).

Sampling and Analysis Plan (SAP) – A sampling and analysis plan (SAP), is required for a remedial investigation/feasibility study (RI/FS) by 40 CFR §430(b)(8). A SAP has two parts: the quality assurance project plan (QAPP) and the field sampling plan (FSP).

Site Inspection (SI) – An onsite investigation to determine whether there is a release or potential release of a hazardous substance and the nature of the associated threats. The purpose is to augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine if further action or investigation is appropriate and to provide detailed data used to score the site with the Hazard Ranking System (HRS).

Solid Waste – Any material (other than those specifically exempted or granted a variance) that is discarded, abandoned, recycled, or inherently waste-like.

Solid Waste Management Unit (SWMU) – Any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous wastes. Such units include any area at a facility where solid wastes have been routinely and systematically released.

Stabilization – Under the EPA use in corrective action, “stabilization” describes any short-term strategy or action taken to control releases or prevent further spreading of contamination until a long-term solution can be implemented. EPA considers stabilization to be a *goal* and interim measures to be the *tool* to achieve that goal.

Temporary Unit (TU) – A temporary unit, as set forth in the CAMU and TU final rule (58 FR 8658), is a tank or container storage unit intended for the short-term (up to one year) management of remediation wastes generated during a RCRA Corrective Action.

Treatability Studies – A treatability study conducted under CERCLA involves testing each alternative for the remedial action to determine the effectiveness of the alternative under actual conditions. Testing can be either bench or pilot scale, depending upon the nature of the technology under evaluation and the level of detail required for the evaluation.

Treatment, Storage, or Disposal Facility (TSDF) – Any facility (other than those facilities exempted) where hazardous wastes are treated, stored, or disposed of.

Work Plan – The work plan documents the decisions and evaluations made during the review of existing information about the site, and describes in detail the tasks required to complete the remedial investigation/feasibility study (RI/FS). A detailed work plan also provides necessary information to develop a schedule for, and to estimate the cost of, the RI/FS.

Acronyms

AEA	Atomic Energy Act
AOC	Area of Concern
ARAR	Applicable or Relevant and Appropriate Requirement
CAA	Clean Air Act
CAMU	Corrective Action Management Unit
CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	CERCLA Information System
CFR	Code of Federal Regulations
CMI	Corrective Measures Implementation
CMS	Corrective Measures Study
CPF	Carcinogenic Potency Factor
CQAP	Construction Quality Assurance Plan
CRP	Community Relations Plan
CWA	Clean Water Act
DCQAP	Data Collection Quality Assurance Plan
DMP	Data Management Plan
DNFA	Determination of No Further Action
DOE	U.S. Department of Energy
DQO	Data Quality Objective
EA	Environmental Assessment
EE/CA	Engineering Evaluation/Cost Analysis
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FFA	Federal Facilities Agreement
FFCA	Federal Facility Compliance Agreement
FS	Feasibility Study
FSP	Field Sampling Plan
HASP	Health and Safety Plan
HRS	Hazard Ranking System
HSWA	Hazardous and Solid Waste Amendments
IAG	Inter-Agency Agreement
IDW	Investigation-Derived Waste
LDR	Land Disposal Restrictions
LTRA	Long-Term Remedial Action
MCL	Maximum Contaminant Level
MCS	Media Cleanup Standards
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEPA	National Environmental Policy Act
NFRAP	No Further Remedial Action Planned
NON	Notice of Noncompliance
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
O&M	Operation and Maintenance
O&MP	Operation and Maintenance Plan
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
PIP	Public Involvement Plan
PM P	Program Management Plan
POC	Point of Compliance
PR	Preliminary Review
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control

ACRONYMS

RA	Remedial Action
RCRA	The Resource Conservation and Recovery Act
RD	Remedial Design
RD/RA	Remedial Design/Remedial Action
RFA	RCRA Facility Assessment
RfD	Reference Dose
RFI	RCRA Facility Investigation
RFI/CMS	RCRA Facility Investigation/Corrective Measures Study
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RQ	Reportable Quantity
SACM	Superfund Accelerated Cleanup Model
SAFER	Streamlined Approach for Environmental Restoration
SAP	Sampling and Analysis Plan
SEA	Site Evaluation Accomplished
SI	Site Inspection
SV	Sampling Visit
SWMU	Solid Waste Management Unit
TSDF	Treatment, Storage, or Disposal Facility
TU	Temporary Unit
UST	Underground Storage Tank
VSI	Visual Site Inspection

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Appendix 2 Bibliography

This appendix provides an annotated list of guidance documents related to the RCRA corrective action program and to the CERCLA remedial program. These documents can be ordered from either:

National Technical Information Service (NTIS)	U.S. Department of Energy
5258 Port Royal Road	Office of Scientific and Technical Information (OSTI)
Springfield, Virginia 22161	P.O. Box 62
(703) 487-4650	Oak Ridge, Tennessee 37831
	(615) 576-1309

A Compendium of Superfund Field Operations

December 1987

NTIS: PB-88-181557 – OSWER Directive No. 9355.0-14

A consolidated reference to all remedial field procedures used by EPA.

A Guide to Developing Superfund Proposed Plans

November 1989

NTIS: PB-90-273855 – OSWER Directive No. 9335.03-02FS-2

Outlines the major components to a Superfund Proposed Plan; a requirement of all RI/FSs.

A Guide to Developing Superfund Records of Decision

November 1989

NTIS: PB-90-273848 – OSWER Directive No. 9335.3-02FS-1

Outlines the major components of a Superfund ROD.

A Guide to Selecting Superfund Remedial Actions

April 1990

NTIS: PB-90-273863 – OSWER Directive No. 9335.0-27/FS

Describes the statutory requirements for CERCLA remedies and the process established in the NCP to meet these statutory requirements.

CERCLA Compliance with Other Laws Manual, Part I and Part II

Part I – August 1988, Part II – August 1989

NTIS: PB-90-272535 and PB-148461 – OSWER Directive Nos. 9234.1-01 and 9234.1-02

Provides guidance on the selection of remedies to meet ARARs under various Federal and State environmental statutes.

Community Relations in Superfund: A Handbook (Interim Guidance)

June 1988

NTIS: PB-90-180830 – OSWER Directive No. 9230.O-03B

Provides information on requirements for coordinating activities at Superfund sites and additional techniques that can be used to enhance a basic community relations program.

**Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities
(Proposed Rule)**

55 FR 30798, July 27, 1990

This proposed rule will create a new Subpart S under 40 CFR Part 264. These regulations will apply to all facilities seeking a permit under RCRA §3005 (c), and will establish the procedures and technical requirements for corrective action under RCRA §3004(u) and (v).

Corrective Measures for Releases to Groundwater from Solid Waste Management Units

August 1985

NTIS: PB-88-185251

Evaluates the relative success or failure for various technologies used for groundwater corrective measures.

Corrective Measures for Releases to Soil from Solid Waste Management Units

August 1985

NTIS: PB-88-185277

Provides guidance for the selection and implementation of corrective measures for releases to soil.

Corrective Measures for Releases to Surface Water from Solid Waste Management Units

August 1985

NTIS: PB-88-185251

Discusses various corrective measures useful in addressing releases to surface water.

Data Quality Objectives for Remedial Response Activities: Volumes 1 and 2

March 1987

NTIS: PB-90-272634 – OSWER Directive No. 9355.O.07B

Provides guidance for developing DQOs for site specific remedial investigation/feasibility studies (RI/FS). Sets forth a procedure for developing sampling and analytical plans to achieve the high-quality, cost-effective data collection.

Executive Order 12088: Federal Compliance with Environmental Laws

October 13, 1978

Delegated responsibility for compliance with pollution control laws to heads of the various Federal agencies, established requirements for pollution abatement plans and reports, and required Federal agencies request funding for pollution abatement projects.

Executive Order 12580: Superfund Implementation

January 23, 1987

Delegates to various Federal officials the responsibilities for implementing CERCLA which were vested in the President by the Superfund Amendments and Reauthorization Act (SARA).

Federal Facilities Hazardous Waste Compliance Manual

January 1990

PB-90-188749 – OSWER Directive No. 9992.4

Provides information to other Federal agencies on the requirements for environmental compliance at Federal facilities.

Guidance for Conducting Preliminary Assessments Under CERCLA

September 1991

EPA/540/G-91-103

Provides an overview of, and general procedures for, conducting a PA. Revises and supersedes the guidance on PAs issued in 1988.

Guidance for Conducting Remedial Investigation/Feasibility Study (RI/FS) Under CERCLA

October 1988

PB-89-184626 – OSWER Directive No. 9355.3-01

Provides an overview of, and general procedures for, conducting an RI/FS. Revises and supersedes the two-volume guidance on the RI and the FS which was published in 1985.

Guidance on Expediting Remedial Designs and Remedial Actions

August 1990

PB-90-273871 – OSWER Directive No. 9355.5-02

Examines ways to speed the RD/RA so that cleanup activities can be completed quickly.

Guidance on Public involvement in RCRA §3008(h) Actions

May 1987

OSWER Directive No. 9901.3

Provides guidance on public involvement in actions under RCRA §3008(h).

Guide for Conducting Treatability Studies Under CERCLA (Interim Final)

December 1989

PB-90-249772 – OSWER Directive No. 9380.0-27

Describes a step-by-step approach for conducting treatability studies to determine the effectiveness of remedial technologies under consideration for use at a CERCLA site.

Hazard Ranking System: Appendix A of the National Contingency Plan

December 14, 1990

55 FR 51532

The final rule establishing the Hazard Ranking System for CERCLA sites. The HRS is the primary mechanism used to list sites on the NPL.

Health and Safety Roles at Remedial Sites

July 1991

PB91-921362/CCE – OSWER Directive No. 9285.1-02

Defines the major components of the health and safety programs required for remedial sites.

Interim Guidance on Preparing Superfund Decision Documents: The Proposed Plan; The Record of Decision; Explanation of Significant Differences; and The Record of Decision Amendment

June 1987

EPA 540/G-89/007

Provides guidance on developing all Superfund decision documents.

Procedures for Completion and Deletion of National Priorities List Sites

October 1988

OSWER Directive No. 9320.2-03A

Discusses the requirements for deleting sites from the National Priorities List.

Public Participation in Environmental Restoration Activities

November 1991

USDOE EH-0221

Provides detailed guidance on community relations activities required as part of environmental restoration projects.

RCRA Corrective Action Decision Documents Guidance

February 1991

PB91-201756 – OSWER Directive No. 9902.6

Provides guidance on the development of the Statement of Basis and other public participation elements of the RCRA corrective action program.

RCRA Corrective Action Interim Measures Guidance

June 1987

OSW:530/SW-88-029 – OSWER Directive No. 9902.4

Provides guidance on decision criteria used to determine the need for an interim measure as well as a model scope of work and strategy for the investigation, design, and implementation of the interim measure.

RCRA Corrective Action Plan

November 1986

OSW:530/SW-88-028 – OSWER Directive No. 9902.3

Provides guidance for developing corrective action requirements in RCRA permits pursuant to RCRA §3004(u) and (v), and corrective action orders issued pursuant to RCRA §3008(h). Also provides a model for developing site-specific compliance schedules for corrective action by laying out model scopes of work for the RFI, CMS, and CMI phases of the corrective action process.

RCRA Corrective Action Program Guide (Interim Guidance)

May 1993

USDOE Office of Environmental Guidance

Provides a detailed discussion of all phases of the RCRA corrective action program under the proposed Subpart S rule.

RCRA Facility Assessment Guidance

October 1986

OSW:530/SW-86-053

Provides guidance on conducting a RCRA facility assessment. The guidance focuses on identifying releases requiring further action, screening SWMUs for further investigation, collecting initial data on contamination levels, and using media-specific investigation techniques.

RCRA Facility Investigation Guidance

May 1989

OSW:530/SW-89-031 – OSWER Directive No. 9502.6C

Provides detailed guidance to owner/operators for performing a RCRA facility investigation. This document identifies the critical steps, describes methods, and presents a general strategy for characterizing releases and the environmental setting of the facility.

RCRA Groundwater Monitoring Compliance Order Guidance

August 1985

NTIS:PB87-155 057/AS

A companion document to the Technical Enforcement Guidance, which presents EPA's strategy for correcting releases to groundwater at interim status facilities.

RCRA Groundwater Monitoring Technical Enforcement Guidance Document

OSWER Directive No. 9933.1

September 1986

A guide to groundwater characterization during an RFI. Provides guidance on site characterization, well design and location criteria, sampling strategy, and data collection requirements.

Superfund Federal-Lead Remedial Project Management Handbook

December 1986

PB-87-183133 – OSWER Directive No. 9355.1-01

Defines the role of the remedial project manager at Federal-lead remedial sites, including project management techniques and a resources available to RPMs at Federal lead sites.

Superfund Remedial Design/Remedial Action (RD/RA) Guidance

PB-88-107529 – OSWER Directive No. 9355.O-04A

Assists agencies and individuals who plan, administer, and manage RD/RAs at Superfund sites.

Superfund Removal Procedures: Revision Number Three

February 1988

PB-90-192055 – OSWER Directive No. 9360.O-03B

Gives step-by-step guidance on conducting removal actions consistent with the NCP, including information on preparation of necessary documents.

Technical Guidance for Corrective Measures – Subsurface Gas

March 1985

NTIS: PB88-185285

Provides an overview and methods used to assess the generation, migration, and risks posed by subsurface gases at SWMUs.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (as amended by the Superfund Amendments and Reauthorization Act (SARA))

42 U.S.C.A. §9601 et seq.

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300)

Provides the organizational structure and establishes the procedures for preparing for and responding to a release or a threat of a release of oil, hazardous substances, pollutants, or contaminants.

The Resource Conservation and Recovery Act (RCRA) (as amended by the Hazardous and Solid Waste Amendments [HSWA] 42 U.S.C. §6901 et seq.

Update to the “Procedures for Completion and Deletion of National Priorities List Sites” Guidance Document Regarding the Performance of Five-Year Reviews

December 1989

PB-90-264556 – OSWER Directive No. 0320.2-03B

Incorporates the EPA 5-year reviews conducted prior to deleting sites from the NPL into the guidance document “Procedures for Completion and Deletion of National Priorities List Sites. ”

USDOE Order 5400.3: Hazardous and Radioactive Mixed Waste Program

February 1989

Provides information on the requirements for DOE facilities with radioactive, hazardous, and mixed waste management responsibilities.

USDOE Order 5400.4: The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

October 6, 1989

Establishes and implements DOE CERCLA policies and procedures as prescribed and provided by the NCP and Executive Order 12580.

Use of Corrective Action Authorities at Closing Facilities

March 1988

OSWER Directive No. 9502.00-7

Provides guidance on the use of Section 3008(h) authorities and post-closure permits to address corrective action at closing interim status facilities.